

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Ian W. Rickets et al.

Examiner: Unknown

Serial No.:

10/658,099

Group Art Unit: Unknown

Filed:

September 9, 2003

Docket: C330.102.101

Title:

SONOELASTOGRAPHY USING POWER DOPPLER

INFORMATION DISCLOSURE STATEMENT

Mail Stop Missing Parts Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached form PTO-1449. One copy of each "Other Document" reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No certification or fee is required.

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Respectfully submitted,

William M. Hienz III

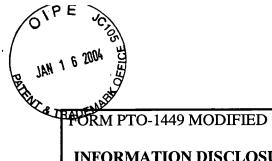
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Name: William M. Hienz III



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INFORMATION DISCLOSURE CITATION

APPLICANT: Ian W. Rickets et al.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION					FILING DATE: September 9, 2003				
				GRO	UP ART UNIT:	Unknown			
		U.S	. PATENT I	OOCU	IMENTS			· _	
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME		CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
	5,086,775	02-1992	Parker et al.						
	5,099,848	03-1992	Parker et al.	•					
		FOREI	GN PATEN	T DO	CUMENTS				
EXAMINER INITIAL	DOCUMENT NO.	DATE	COUNTRY		CLASS	SUBCLASS	TRANSI YES	LATION NO	
	OTHER DOC	 	 cluding Au	hor T	itle Date P	 ertinent Pages	etc)		
	Bishop, J. et al Journal of Mag Cooper, D.H. e	., "Magnetic R netic Resonan	esonance Imace Imace Imaging, 8	aging o 3:1257	of Shear Wave -1265, 1998.	Propagation is	n Excised		
	Ultrasound," British Machine Vision Conference (BMVC), pages 585-594, 1996.								
	Doyley, M.M. et al., "Evaluation of an Iterative Reconstruction Method for Quantitative								
	Elastography," Phys. Med. Biol, 45:1521-1540, 2000.								
	Gao, L. et al., "Imaging of the Elastic Properties of Tissue – a Review," Ultrasound Med. Biol, 22:959-77, 1996.								
	Jensen, J.A., "Ultrasound Imaging and its Modelling," Imaging of Complex Media with Acoustic and Seismic Waves, Topics in Applied Physics, pages 1-38, 2000.								
	Kaluzynski, K. et al., "Strain Rate Imaging using Two-Dimensional Speckle Tracking," IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control, 48 (4):1111-1123, July 2001.								
	Lerner, R.M. et al., "Sono-Elasticity Images Derived from Ultrasound Signals in Mechanically Vibrated Targets," Rochester Center for Biomedical Ultrasound, University of Rochester, Rochester, New York, pages 127-129.								
	Lerner, R.M. et al., "Sono-elasticity: Medical Elasticity Images Derived from Ultrasound Signals in Mechanically Vibrated Targets," In Proc. 16 th Int. Symp. Acoustical Imaging, vol. 19, pages 317-327, New York, 1988.								
	McKenna, Stephen et al., "Sonoelastography using Compensated Power Doppler," Proceedings of the Second IASTED International Conference: Visualization, Imaging, and Image Processing, Malaga, Spain, September 9-12, 2002.								
	O'Donnell, M. et al., "Internal Displacement and Strain Imaging Using Ultrasonic Speckle Tracking," IEEE Trans. Ultrason. Ferroelectr. Freq. Control, 41:314-325, 1994.								
	Ophir, J., "Elastography: Ultrasonic Imaging of Tissue Strain and Elastic Modulus in Vivo," Eur. J. Ultrasound, 3:49-70, 1996.								
	Ophir, J., "Scientists Use Finite Element Method in Developing New Cancer Detection Technique," NASA Tech. Briefs, pages 86-87, August 1998. Prager, R.W. et al., Abstract of "Rapid Calibration for 3-D Freehand Ultrasound," Ultrasound in Medicine and Biology, 24(6):855-869, 1998.								
	Rohling, R.N. et al., "Spatial Compounding of 3D Ultrasound Images," Technical Report Tech. Rep. CUED/F-INFENG/TR270, University of Cambridge, October 1996.							ort Tech.	



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IN AN APPLICATION	GROUP ART UNIT: Unknown							
OWNED DOOLD ASSESSED.								
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)								
Rohling, R.N. et al., "Automatic Registration of 3-D Ultrasound Images," Technical Report Tech. Rep. CUED/F-INFENG/TR290, University of Cambridge, May 1997.								
Rubens, D. et al., "Sonoelasticity Imaging of Prostate Cancer: in vitro results," Radiology, 195:379-383, 1995.								
"Sonoelastography Using Compensated Power Doppler," University of Dundee, Department of Applied Computing, 2 nd IASTED International Conference: Visualization, Imaging, and Image								
Processing (VHP), Benalmadena Malaga, September 10 th 2002.								
Taylor, L. et al., "Three-Dimensional Sonoelastography: Principles and Practices," Phys. Med. Biol., vol. 45, pp. 1477-1494, 2000.								
Yamakoshi, Y. et al., "Ultrasonic Imaging of Internal Vibration of Soft Tissue under Forced Vibration," IEEE Trans. Ultrason. Ferroelectr. Freq. Control, 37:45-53, 1990.								
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EXAMINER SIGNATURE	DATE CONSID	ERED						
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